



Dart Aerospace Ltd.
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Hawkesbury, ON
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Tel (613) 632-5200

D412-742-013
Job Sheet 168765



Part No: D412-742-013

Job Qty: 1 ea

Part Name: Skidtube Fits LH or RH High Gear, DART (Apical) Tri-Bag Float Compatible



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 11/22/17

Job Tracking No:

Due Date: 12/8/17

Created By: Marie Lajeunesse

Type: Stock

Description:

Customer: Aeroservicios Especializados SA de CV - ASES (CASES01)

Calle Rio San Lorenzo #699 Int 102, San Pedro Garza Garcia Fuentes Del Valle, Nuevo León, 66220 Mexico
ph:52-938-382-2113 fx:52-938-384-0535.

Note: IPP Rev: A 05.10.13 New Issue KJ/JLM IPP Rev: B 06-06-08 As per DSI9336 JLM IPP Rev: C 07-05-28 As per Rev C JLM IPP rev D 07.11.01 ecn 1053P EC IPP rev E 07.11.27 ecn 1072 EC verified: DD IPP Rev: F 08-09-08 ecn 08-510 DD verified: EC IPP Rev: G 09-01-23 as per DSI9441 DD verified: EC IPP Rev: H 11.11.01 as per DSI9517 REV.B DD verified: EC IPP rev: I 12.01.12 PER IIN REV.E DD VERF: JLM IPP REV: J 17.05.10 AS PER CHG010 DD VERF: JFS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
110	Start up Operation	1 Ea		12/8/17	0.00	0.00	Start Up Stores/Pkg-1		SMB
115	Packaging	1 pcs		12/8/17	0.00	0.00	Packaging1		SMB
120	QC	1 pcs		12/8/17	0.00	0.00	QC4		17.12
125	DC	1 pcs		12/8/17	0.00	0.00	DC		
130	Packaging	1 pcs		12/8/17	0.00	0.00	Packaging3		SMB
140	QC21-FG	1 Ea		12/8/17	0.00	0.00	QC21		JAN 16 2016

Part Op 125 - Photocopy bluefile and create labels per PPP D412-742-013 CHG0010
Descriptions: 130 - Identify and pack for shipping as per PPP D412-742-013

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
110-Start up Operation	AN3C37A SO23430	1 ✓	0	0	0
	AN3C40A SO23439	1 ✓	75	0	0
	AN3C41A SO23437	1 ✓	492	0	0
	AN3C42A SO23425	1 ✓	29	0	0
	SO23435 AN3C43A SO23422x2	4 ✓	41	0	0
	AN3C46A SO23430	5 ✓	223	0	0
	AN4C47A SO23418	4 ✓	42	0	0
	AN4C52A SO23417	4 ✓	61	0	0
	AN4C53A SO23415	4 ✓	95	0	0
	AN4C6A SO23414	16 ✓	302	0	0
	SO23416 x2 AN4C7A Fm137361-2x	4 ✓	113	0	0
	AN6C12A SO23409	8 ✓	125	0	0
	D2571 SO23407	1 ✓	17	0	0
	D2572 F158142	1 ✓	15	0	0
	D2573 F158816	1 ✓	22	0	0
	D2574 SO23404	1 ✓	17	0	0
	D2747 SO23402	4 ✓	142	0	0
	D2876 SO23401	2 ✓	65	0	0
	D2877 SO23400	2 ✓	54	0	0

5030225

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐	AGAINST DEPARTMENT/PROCESS Type ☐ Weight ☐ Gauge ☐ Feature ☐		Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging Supplier ☐	Engineering Quality ☐ Other ☐
Date: _____ Step #: _____		 S031976 Skidtube Fits LH or RH High Gear, DART (Apical) Tri-Bag Float Compatible PART NO: D412-742-013 Original Serial #: S031976 Revision: _____ Operation: _____ Change No: _____ Start up Operation 01/15/18 CHG010 Job No: 168765			MRB (QSI042) Approval _____	
Description Work Order Dev _____					Completed By _____	
					Lead hand / Supervisor Approval Verification _____	
					QC / QA Coordinator Approval _____	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Fo ☐ Bending ☐ Centre Not C ☐ Cracks ☐ Crimp/Kink/Ri ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in T ☐ Marks/Chatter ☐ OTHER: _____	Power Loss/Surge ☐ io/Program ☐ in ☐ d ☐ ng Stock Pulled ☐ of Sequence ☐ et ☐ eled ☐ unction ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐

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D3403-1	SO23999	8✓	38	0	0
D3403-3	SO23997	8✓	73	0	0
D3403-5	SO23395	8✓	33	0	0
D3405-041	SO23390	1✓	13	0	0
D3405-043	SO23387	1✓	14	0	0
D3407-041	SO10596	1✓	18	0	0
SO23446	D3417-3	SO23389	2✓	40	0
D3456-1	SO23382	1✓	166	0	0
D3533-1	SO23381	2✓	39	0	0
D3672-11	SO23380	8✓	624	0	0
D3672-3	SO23378	32✓	724	0	0
D3672-9	SO23379	8✓	982	0	0
D412-742-043	SO30225	1	0	0	0
MS21043-3	SO23378	13✓	709	0	0
MS21043-4	SO23377	29✓	798	0	0
NAS1149C0332R	SO23372	26	13,419	0	0
SO23370Y3	NAS1149C0432R	SO23371X32	29✓	1,078	0
NAS1149C0632R	SO23368	8✓	149	0	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐			FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		
OTHER : ☐					

(CONTINUED FROM PAGE 21)

Item	Qty -013	Qty -043	Part Number	Description
40	1		D2571	SADDLE, FWD OUTSIDE
41	1		D2572	SADDLE, FWD INSIDE
42	1		D2573	SADDLE, AFT OUTSIDE
43	1		D2574	SADDLE, AFT INSIDE
44	2		D2876	SADDLE SPACER
45	2		D2877	SADDLE SPACER
46A	8		D3403-1	BUSHING
46B	8		D3403-5	BUSHING
47A	4		D2747	SET SCREW
47B	2		D3533-1	SET SCREW
48	16		AN4C6A	BOLT
49A	4		AN4C52A	BOLT
49B	4		AN4C53A	BOLT
50	8		AN6C12A	BOLT
51A	32		D3672-3	WASHER (REPLACES NAS1515H4L)
51B	32		AN960C416L	WASHER
52A	8		D3672-9	WASHER (REPLACES NAS1515H6L)
52B	8		AN960C616L	WASHER
53	8		D3672-11	WASHER (REPLACES NAS1515H7L)
54	24		MS21043-4	NUT
55	4		AN4C7A	BOLT
56	2		D3591-1	BUSHING
60	8		D3403-3	BUSHING
61	1		D3405-041	GHW LUG
62	1		D3405-043	GHW LUG
63	4		AN4C47A	BOLT
64	4		MS21043-4	NUT
70	1		D3407-041	TOW RING
71	2		D3417-3	WASHER
72	1		MS21043-4	NUT
73	1		D3456-1	WASHER
91	1		AN3C37A	BOLT
92	1		AN3C40A	BOLT
93	1		AN3C41A	BOLT
94	1		AN3C42A	BOLT
95	4		AN3C43A	BOLT
97	5		AN3C46A	BOLT
99	26		AN960C10L	WASHER
100	13		MS21043-3	NUT

*DENOTES PART IS INCLUDED WITH D3391-043 ASSEMBLY ABOVE

**DENOTES THAT PART IS INCLUDED WITH ASSEMBLY ABOVE

REFERENCE ONLY

5.2 D412-742-013 (DART TRI-BAG) Float Skidtube Installation Parts List

Item	Qty -013	Qty -043	Part Number	Description
	X		D412-742-013	FLOAT SKIDTUBE INSTALLATION
	1	X	D412-742-043	FLOAT SKIDTUBE
		1	D3391-043	412 FLOAT SKIDTUBE
1		*24	*AN3C4A	*BOLT
3		*10	*AN3C6A	*BOLT
4		*4	*AN3C7A	*BOLT
5		*38	*AN960C10L	*WASHER
21		*1	*D4095-041	*WEARSHOE (REPLACES D3564-1)
22		*1	*D4095-043	*WEARSHOE (REPLACES D3564-3)
23		*1	*D4095-045	*WEARSHOE (REPLACES D3564-5)
10		*1	*D3391-021	*412 FORWARD TUBE
11		**1	**D3401-041	**TOW CAP
12A		**10	**AELS-1032-225	**INSERT (REPLACES NAS1330S3KB166)
13		**10	**AN3C4A	**BOLT
14A		**4	**D3672-1	**WASHER (REPLACES NAS1515H3L)
14B		**10	**AN960C10L	**WASHER
24		**1	**D4095-051	**WEARSHOE (REPLACES D3564-13)
20		*1	*D3391-023	*412 MID TUBE
28		**20	**AELS-1032-130	**INSERT (REPLACES NAS1330S3KB116)
30		*1	*D3391-025	*412 AFT TUBE
25		**1	*D4095-049	**WEARPAD (REPLACES D3537-1)
26		**1	*D4095-047	**WEARPAD (REPLACES D3537-7)
31		**1	**D2646	**AFT CAP
32		**14	**AELS-1032-130	**INSERT
36		**8	**AELS-1032-225	**INSERT (REPLACES NAS1330S3KB366)
37A		**6	**AN3C4A	**BOLT
37B		**4	**AN3C5A	**BOLT
38A		**2	**D3672-1	**WASHER (REPLACES NAS1515H3L)
38B		**10	**AN960C10L	**WASHER

(CONTINUED ON PAGE 22)

Operation Number	Operation	Serial Number	Job	Quantity	Weight	Original Serial Number	Location	Container	Status	Added	Special Comments	Label	Supplier	Change No
Part Number: CR3213-5-03 Revision: Cherry Rivet														
100	Receive Ea	S023372	168765	52 Ea	0	M138207	CCK003		Stock	12/16/2017	Issue Container			
Operation Totals:			1	52	0									
Part Totals:			1	52	0									
Part Number: D3456-1 Revision: Washer														
140	QC21-SA	S023382	168765	1 Ea	0	S011330	ST036		Stock	12/16/2017	Issue Container			
Operation Totals:			1	1	0									
Part Totals:			1	1	0									
Part Number: D3672-3 Revision: Washer, Phenolic														
140	QC21-SA	S023528	168765	0 Ea	0	S023004	FG001		Stock	12/16/2017	Issue Container			
Operation Totals:			1	0	0									
Part Totals:			1	0	0									
Part Number: D412-742-013 Revision: Skidtube Fits LH or RH High Gear, DART (Apical) Tri-Bag Float Compatible														
140	QC21-FG	S031976	168765	1 Ea	0	S031976	FG074		On Truck	1/15/2018	Issue Container			
Operation Totals:			1	1	0									
Part Totals:			1	1	0									
Part Number: MS21043-4 Revision: Nut														
100	Receive Ea	S023377	168765	29 Ea	-3	s000677	OVER007		Stock	12/16/2017	Issue Container			
Operation Totals:			1	29	-3									
Part Totals:			1	29	-3									
Part Number: NAS1149C0332R Revision: Washer														
100	Receive Ea	FM138207-25	168765	26 Ea	0	M138207	ST260A		Stock	10/10/2017				
Operation Totals:			1	26	0									
Part Totals:			1	26	0									
Part Number: NAS1149C0432R Revision: Washer														
100	Receive Ea	S023370	168765	3 Ea	0	M138441	ST266		Stock	12/16/2017	Issue Container			
		S023371	168765	29 Ea	0	M134676	ST266		Stock	12/16/2017	Issue Container			
Operation Totals:			2	32	0									
Part Totals:			2	32	0									
Totals:			8	141	-3									